

Osteopontin-Coated Surfaces and Methods of Use

Abstract of the Invention

An osteopontin containing implant which increases the rate of osseointegration and the percentage of bone apposition is described. In one embodiment, the implant includes osteopontin or an active fragment thereof or an active peptide derived therefrom. In another embodiment, the implant includes a material suitable for use *in vivo* within a subject in combination with a releasable form of osteopontin forming an osteopontin containing implant. The disclosed osteopontin derived peptides bind to various cell types and play important roles in cellular differentiation and/or motility. Many of these interactions are mediated by integrins as disclosed. Antibodies provide a mechanism to abolish or attenuate the activities of the claimed peptides.